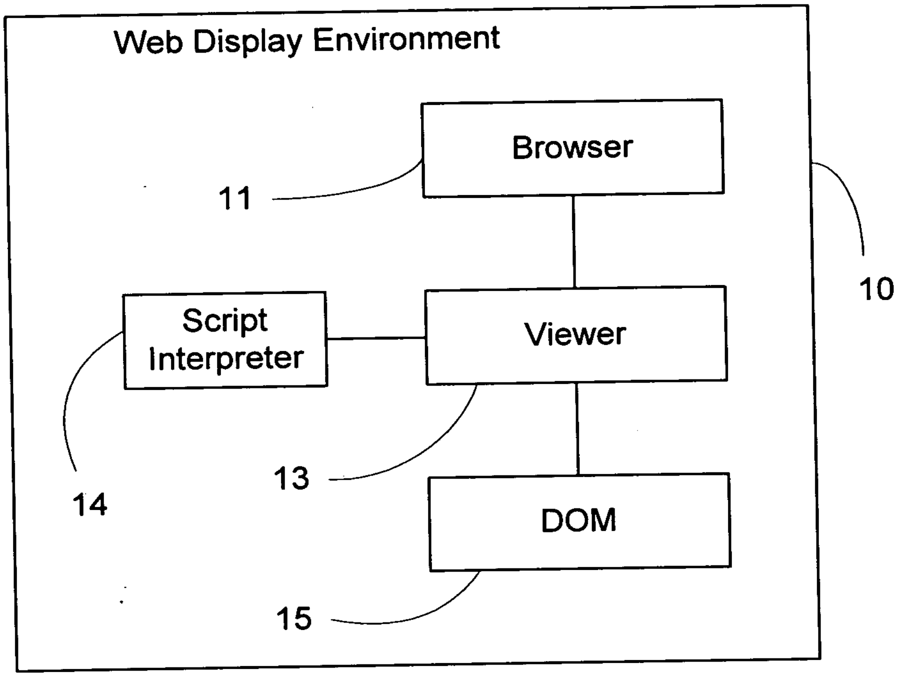


Figure 1
PRIOR ART

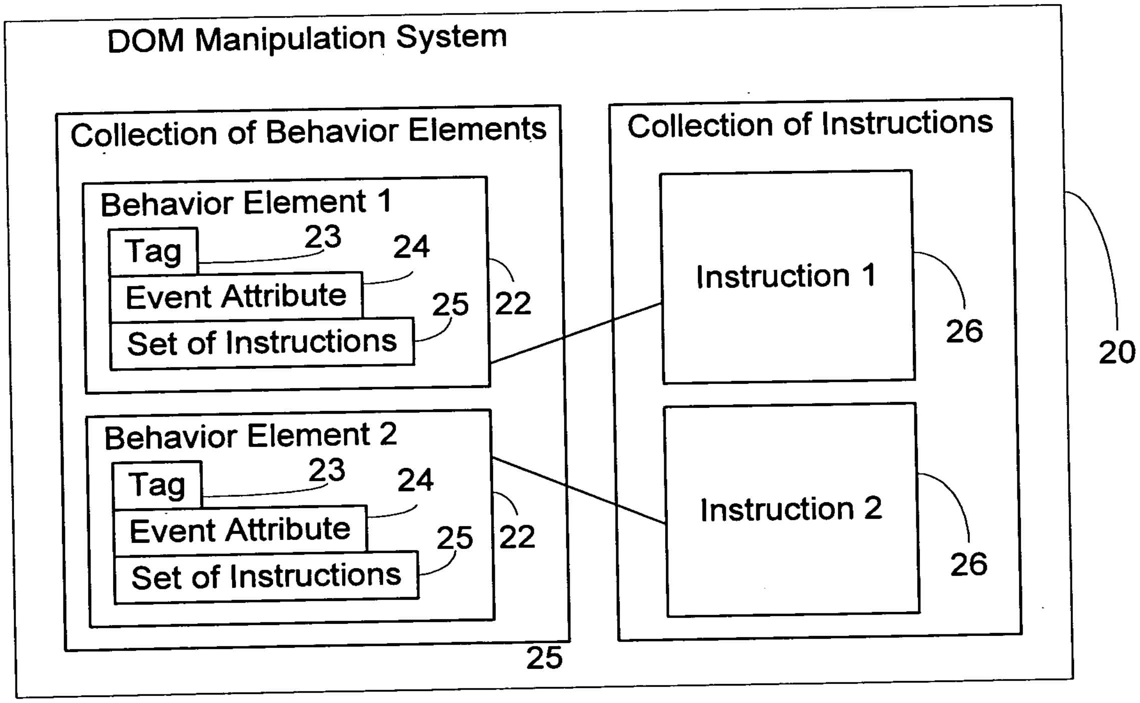


Figure 2

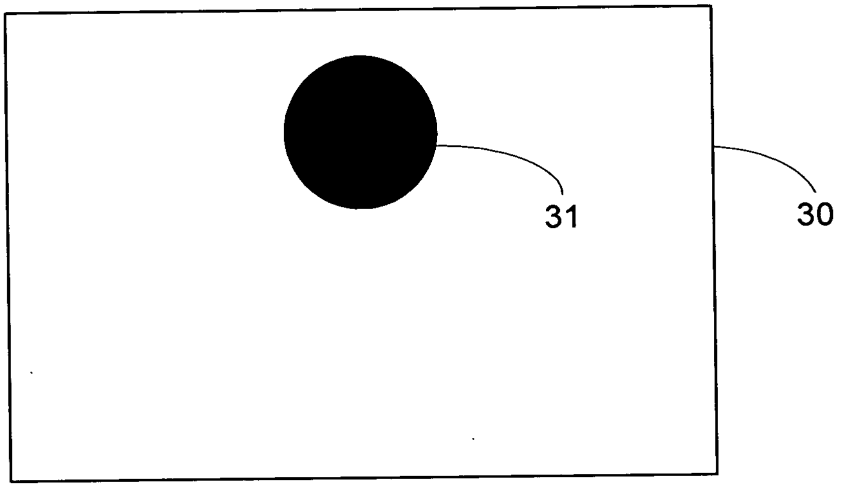


Figure 3

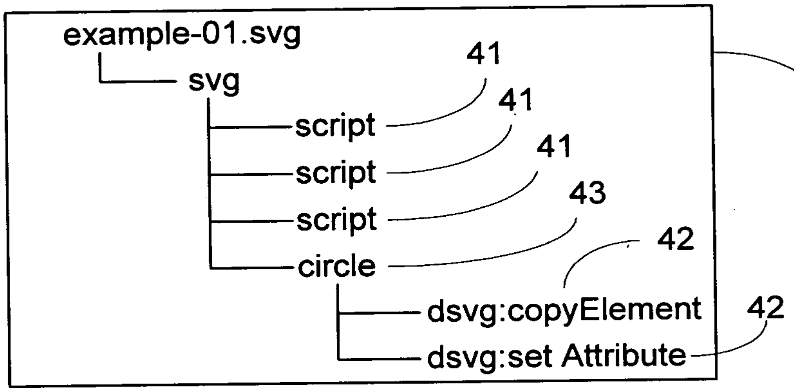


Figure 4

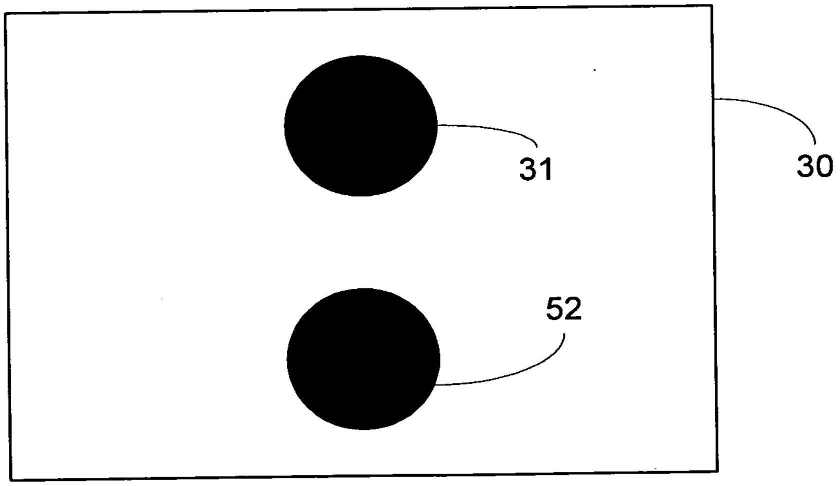


Figure 5

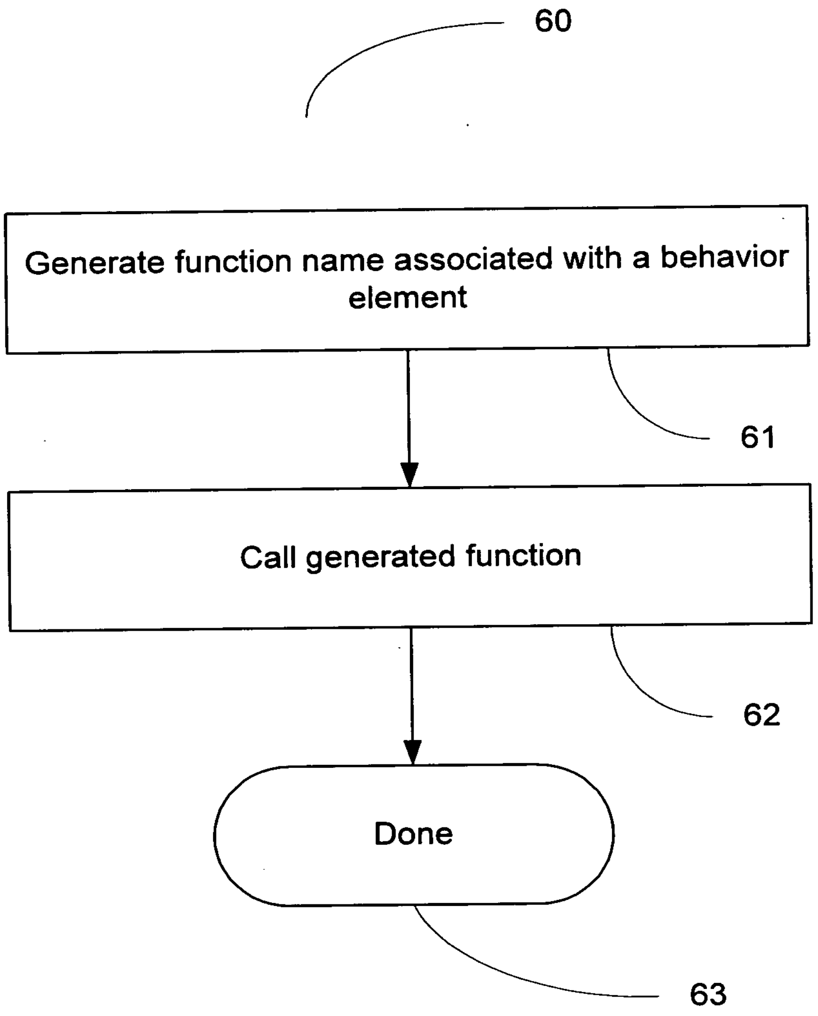

60
Generate function name associated with a behavior element
61
Call generated function
62
Done
63

Figure 6

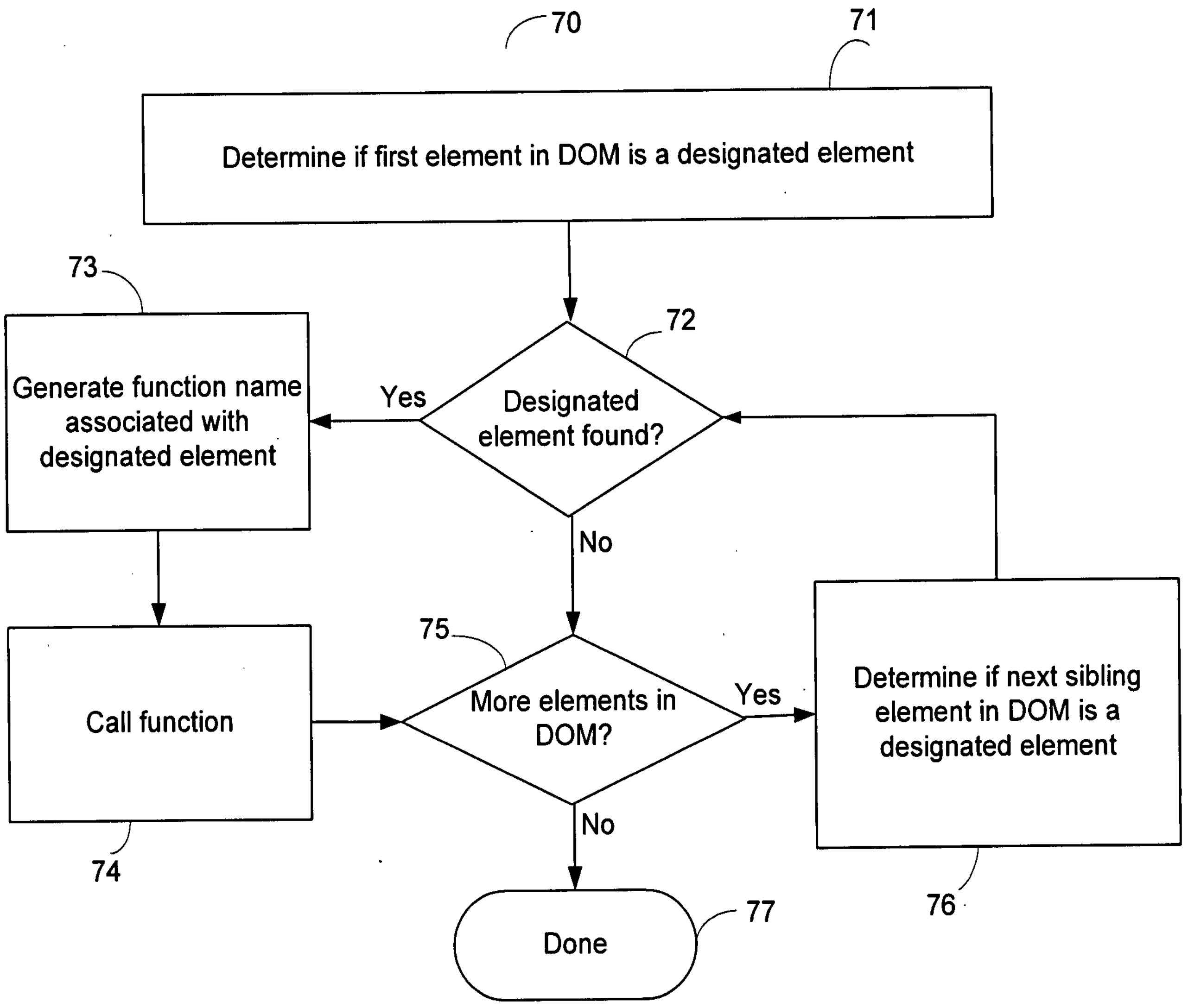

70
71
Determine if first element in DOM is a designated element
73
72
Designated element found?
Yes
Generate function name associated with designated element
No
Call function
75
More elements in DOM?
Yes
Determine if next sibling element in DOM is a designated element
74
No
Done
77
76

Figure 7

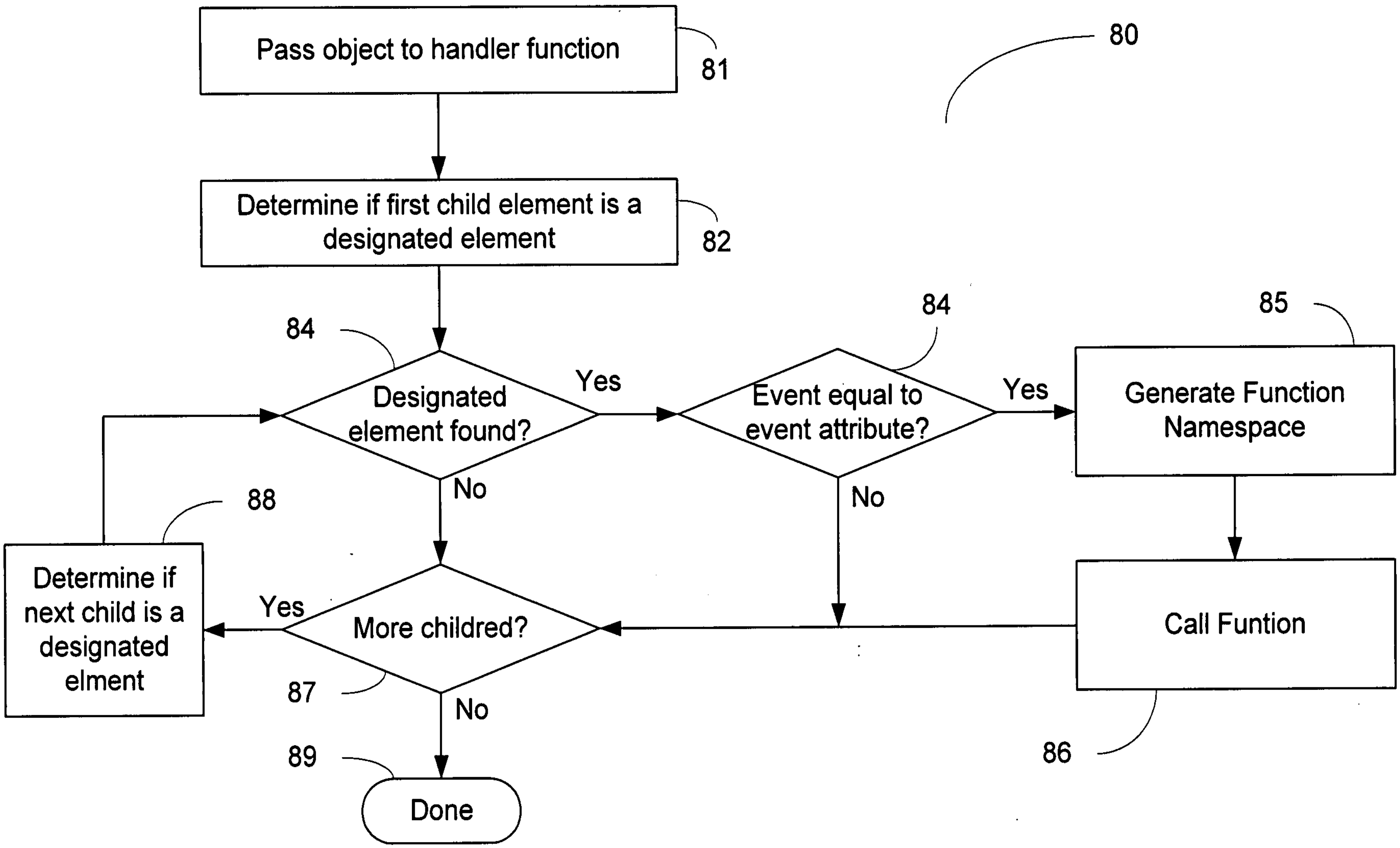

80
Pass object to handler function
81
Determine if first child element is a designated element
82
84
Designated element found?
Yes
No
84
Event equal to event attribute?
Yes
No
85
Generate Function Namespace
Call Funtion
86
88
Determine if next child is a designated elment
Yes
More childred?
87
No
89
Done

Figure 8

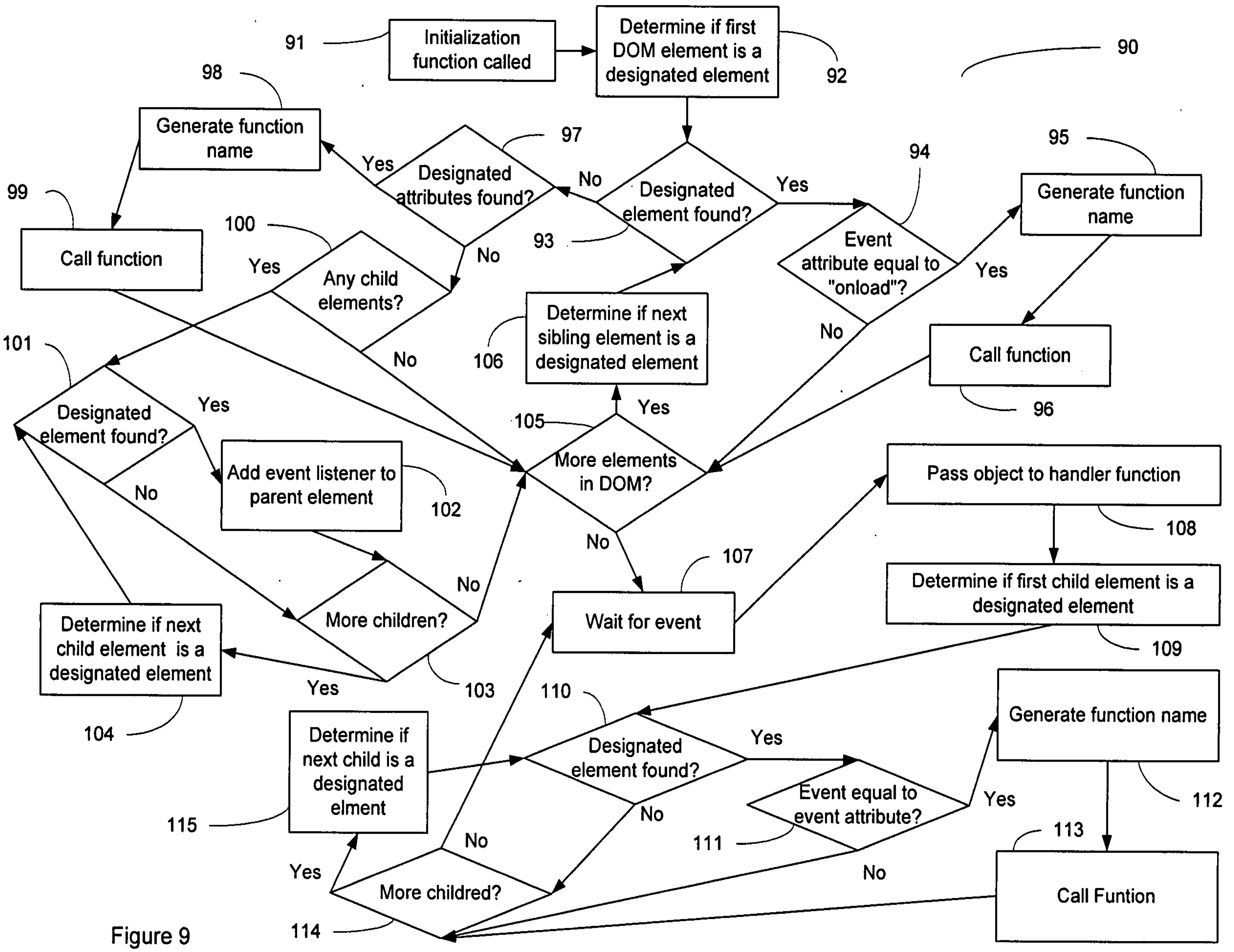

90
91
Initialization function called
Determine if first DOM element is a designated element
92
Designated element found?
93
Yes
No
Event attribute equal to "onload"?
94
Yes
No
Generate function name
95
Call function
96
Designated attributes found?
97
Yes
No
Generate function name
98
Call function
99
Any child elements?
100
Yes
No
Designated element found?
101
Yes
No
Add event listener to parent element
102
More children?
103
Yes
No
Determine if next child element is a designated element
104
More elements in DOM?
105
Yes
No
Determine if next sibling element is a designated element
106
Wait for event
107
Pass object to handler function
108
Determine if first child element is a designated element
109
Designated element found?
110
Yes
No
Event equal to event attribute?
111
Yes
No
Generate function name
112
Call Funtion
113
More childred?
114
Yes
No
Determine if next child is a designated elment
115

Figure 9

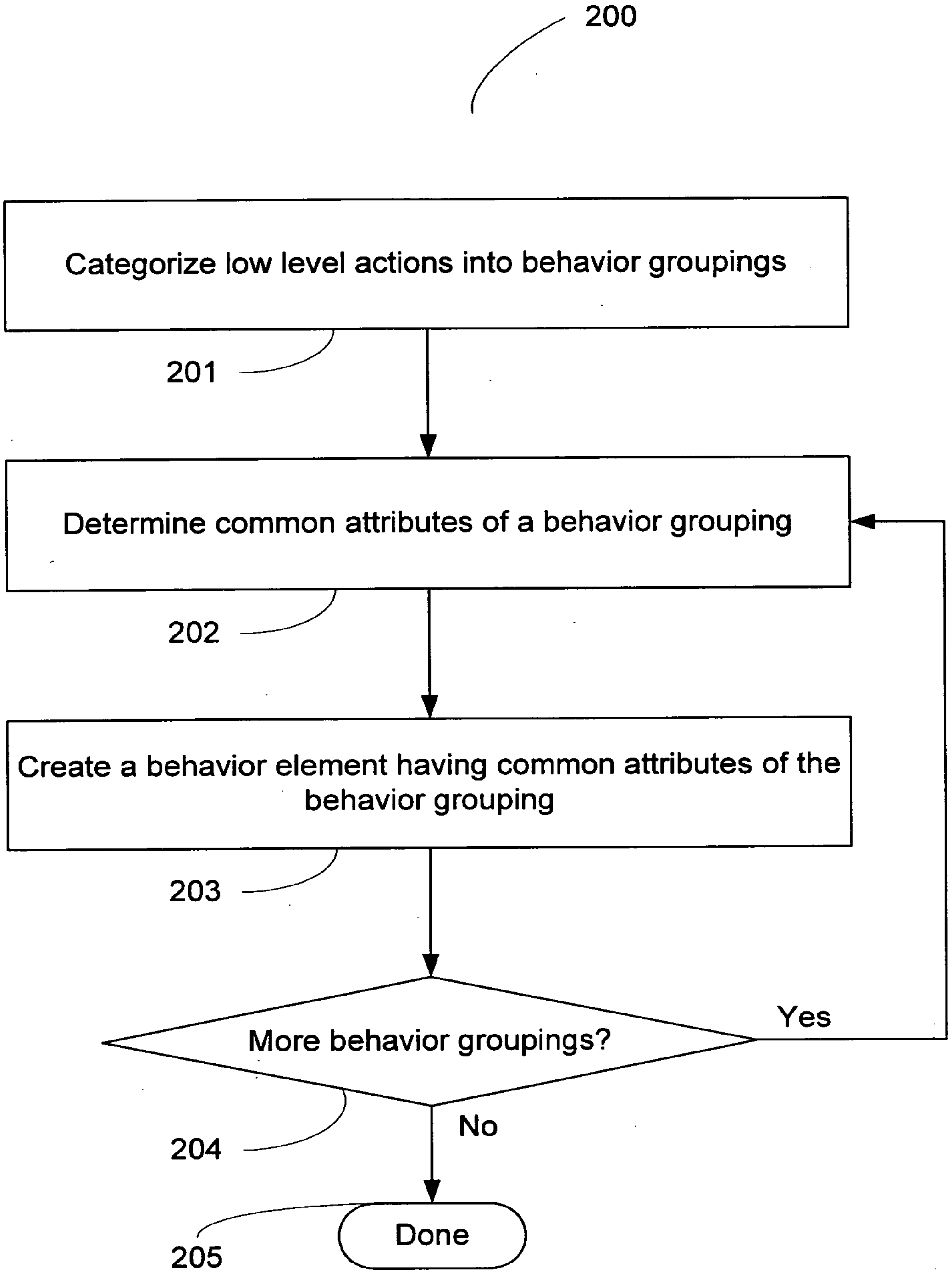

200
Categorize low level actions into behavior groupings
201
Determine common attributes of a behavior grouping
202
Create a behavior element having common attributes of the behavior grouping
203
More behavior groupings?
Yes
No
204
Done
205

Figure 10

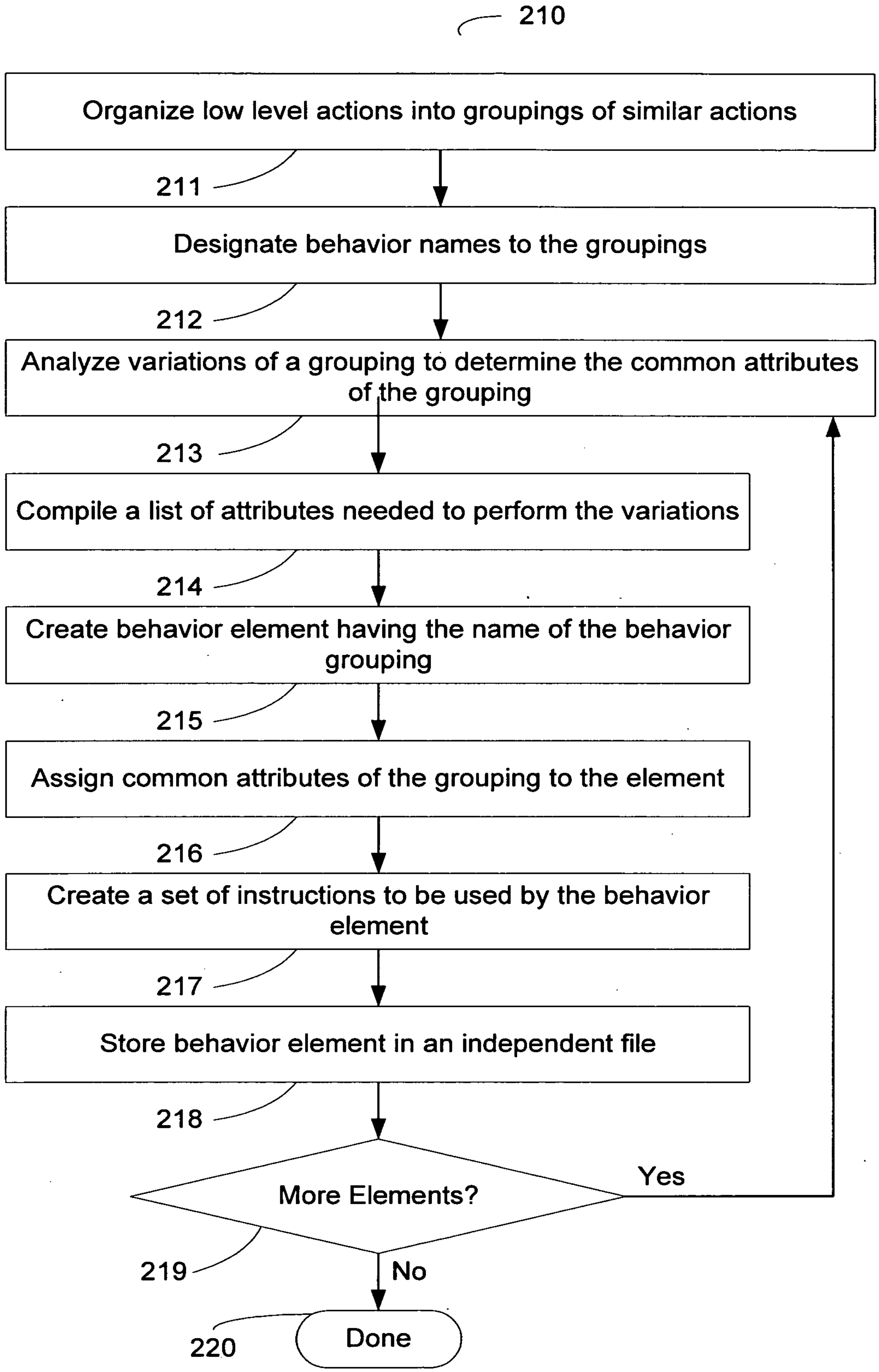
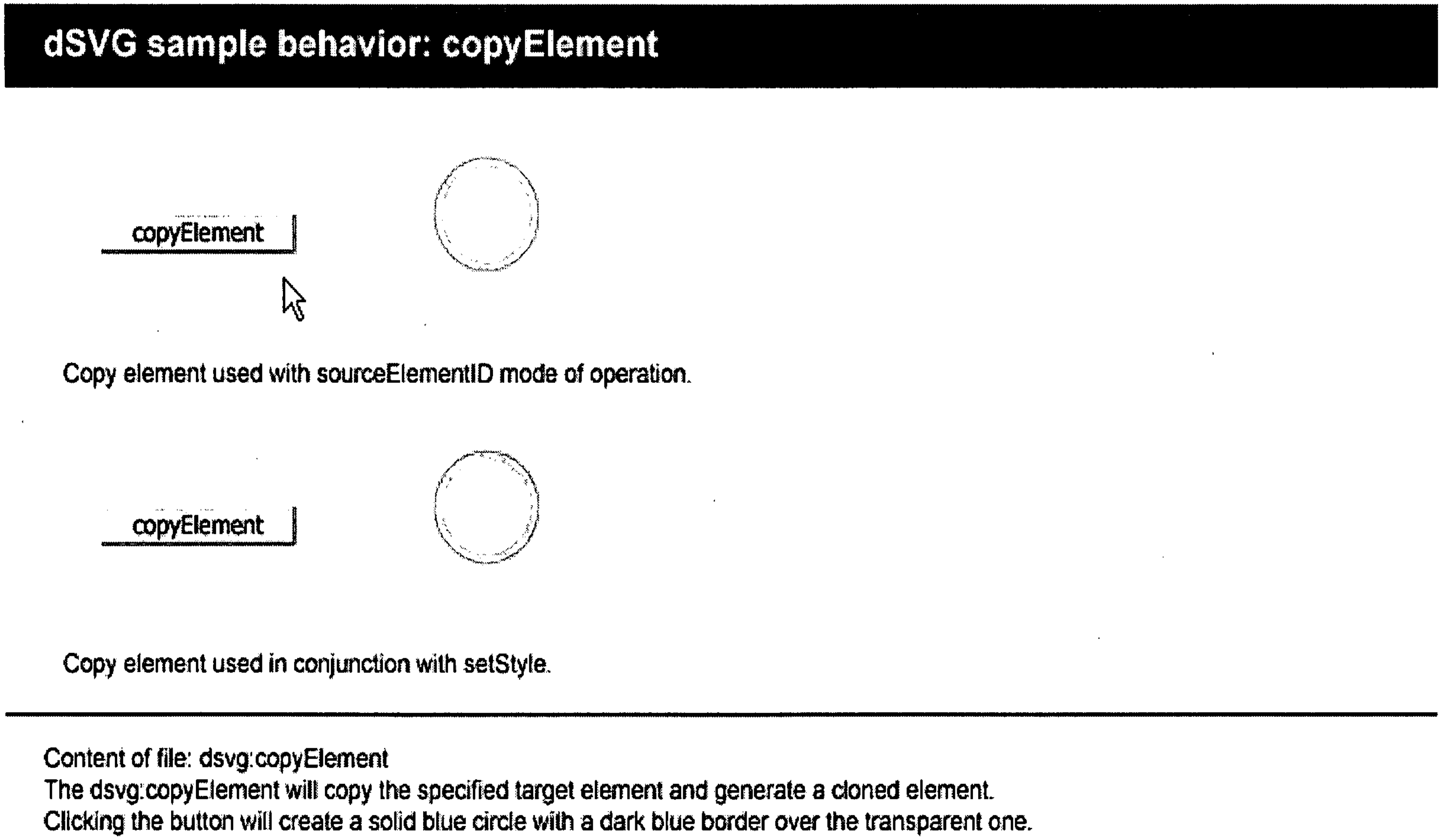

210
Organize low level actions into groupings of similar actions
211
Designate behavior names to the groupings
212
Analyze variations of a grouping to determine the common attributes of the grouping
213
Compile a list of attributes needed to perform the variations
214
Create behavior element having the name of the behavior grouping
215
Assign common attributes of the grouping to the element
216
Create a set of instructions to be used by the behavior element
217
Store behavior element in an independent file
218
More Elements?
Yes
219
No
220
Done

Figure 11



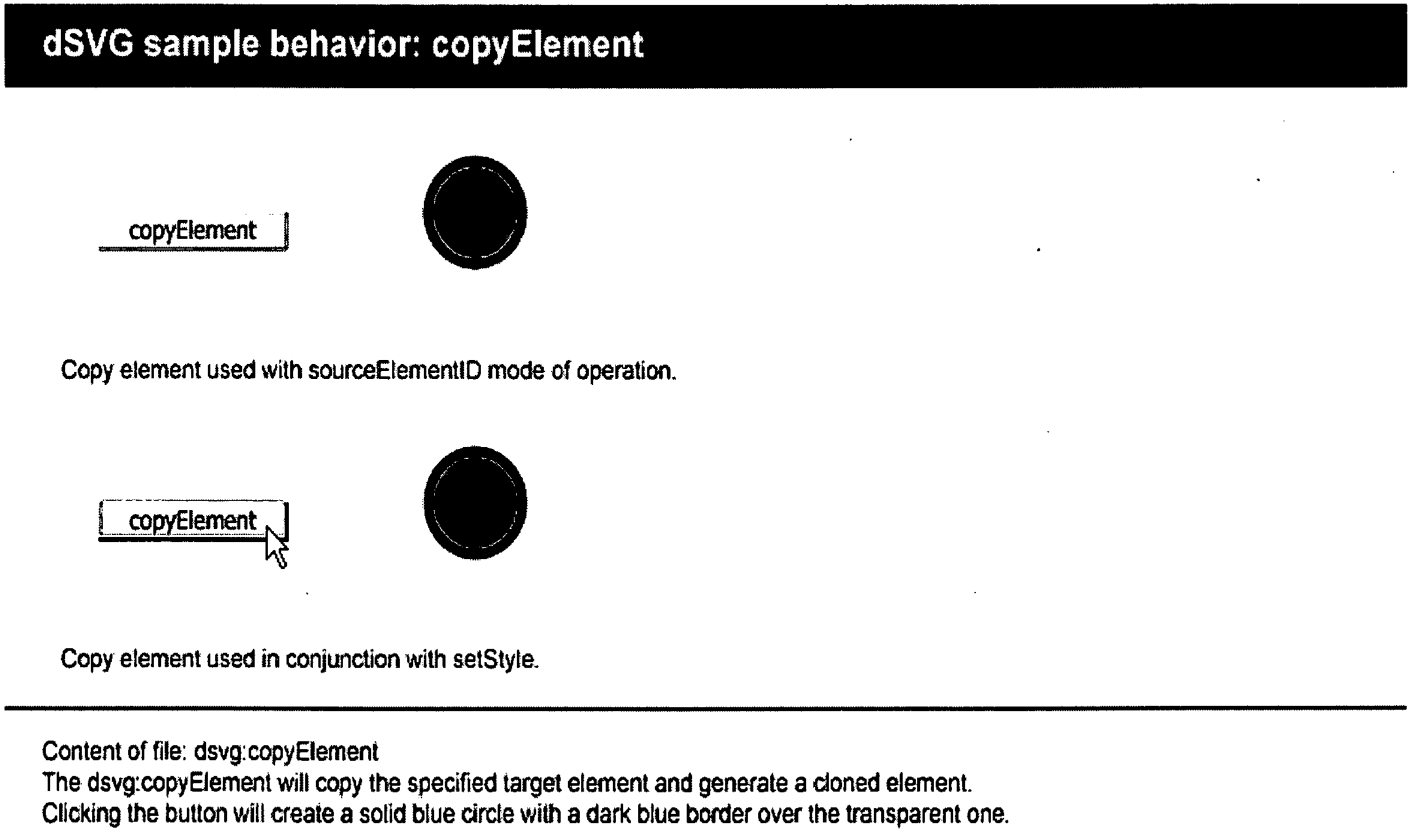
dSVG sample behavior: copyElement

Copy element used with sourceElementID mode of operation.

Copy element used in conjunction with setStyle.

Content of file: dsvg:copyElement
The dsvg:copyElement will copy the specified target element and generate a cloned element.
Clicking the button will create a solid blue circle with a dark blue border over the transparent one.

Figure 12A



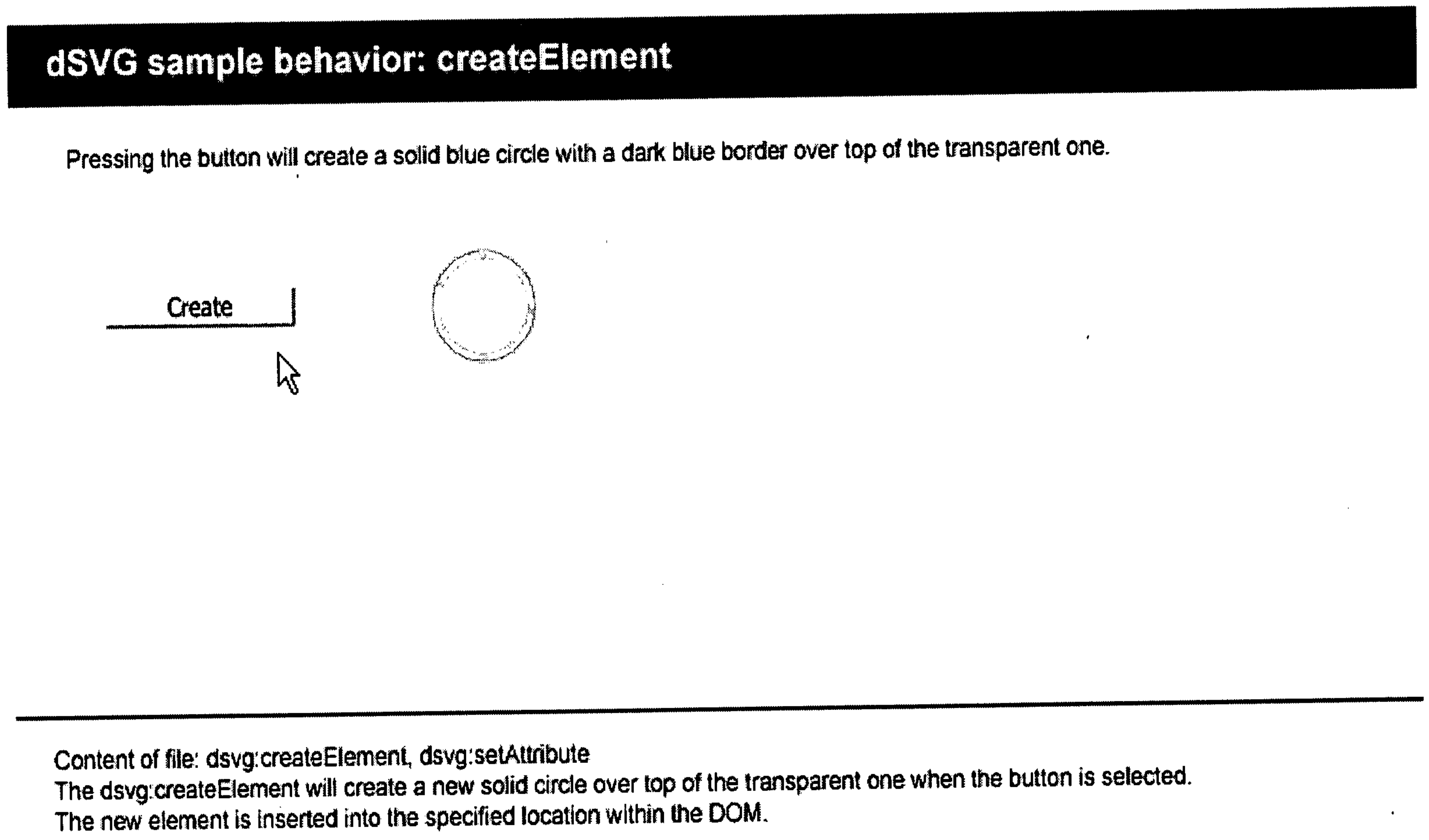
dSVG sample behavior: copyElement

Copy element used with sourceElementID mode of operation.

Copy element used in conjunction with setStyle.

Content of file: dsvg:copyElement
The dsvg:copyElement will copy the specified target element and generate a cloned element.
Clicking the button will create a solid blue circle with a dark blue border over the transparent one.

Figure 12B

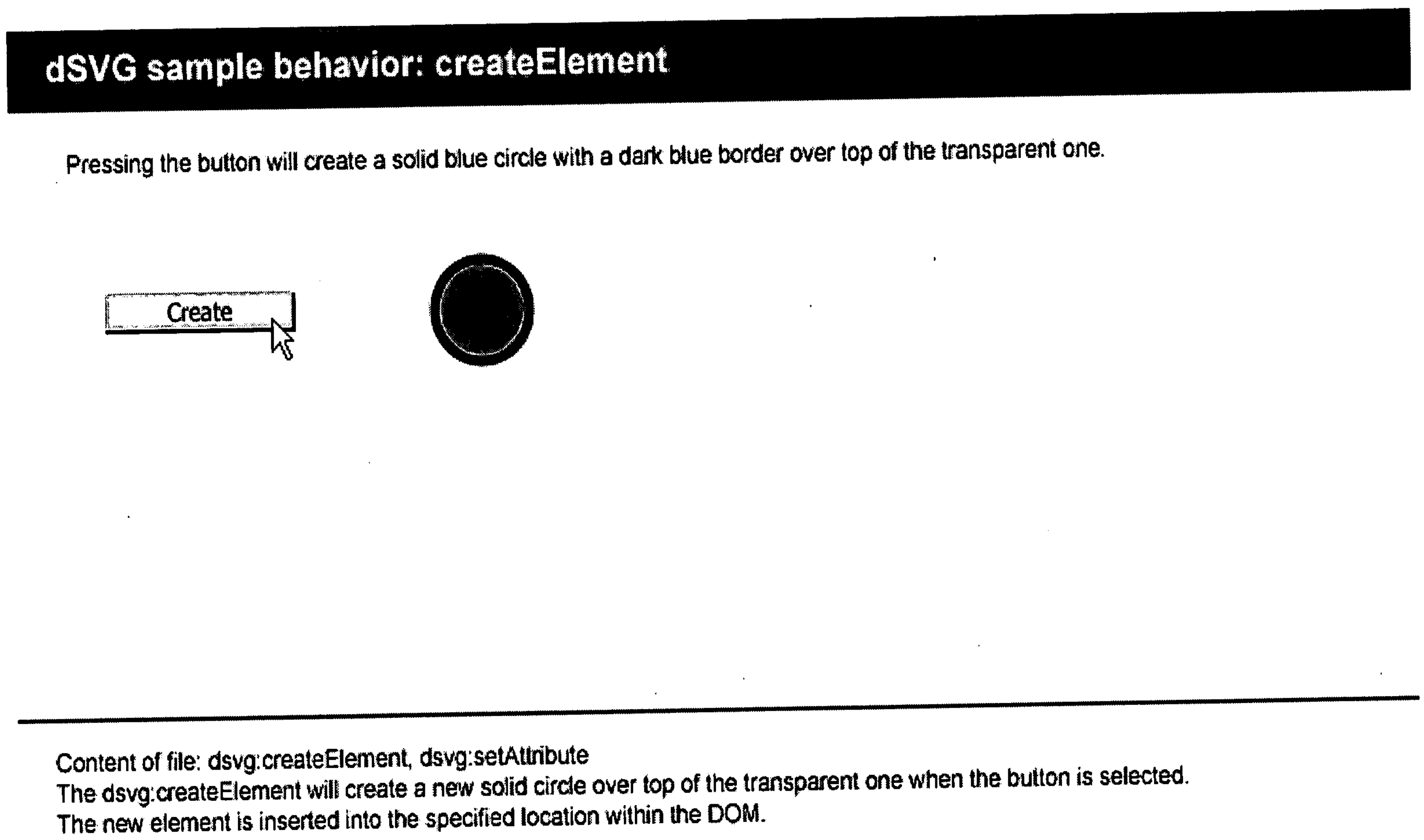


dSVG sample behavior: createElement

Pressing the button will create a solid blue circle with a dark blue border over top of the transparent one.

Content of file: dsvg:createElement, dsvg:setAttribute
The dsvg:createElement will create a new solid circle over top of the transparent one when the button is selected.
The new element is inserted into the specified location within the DOM.

Figure 13A

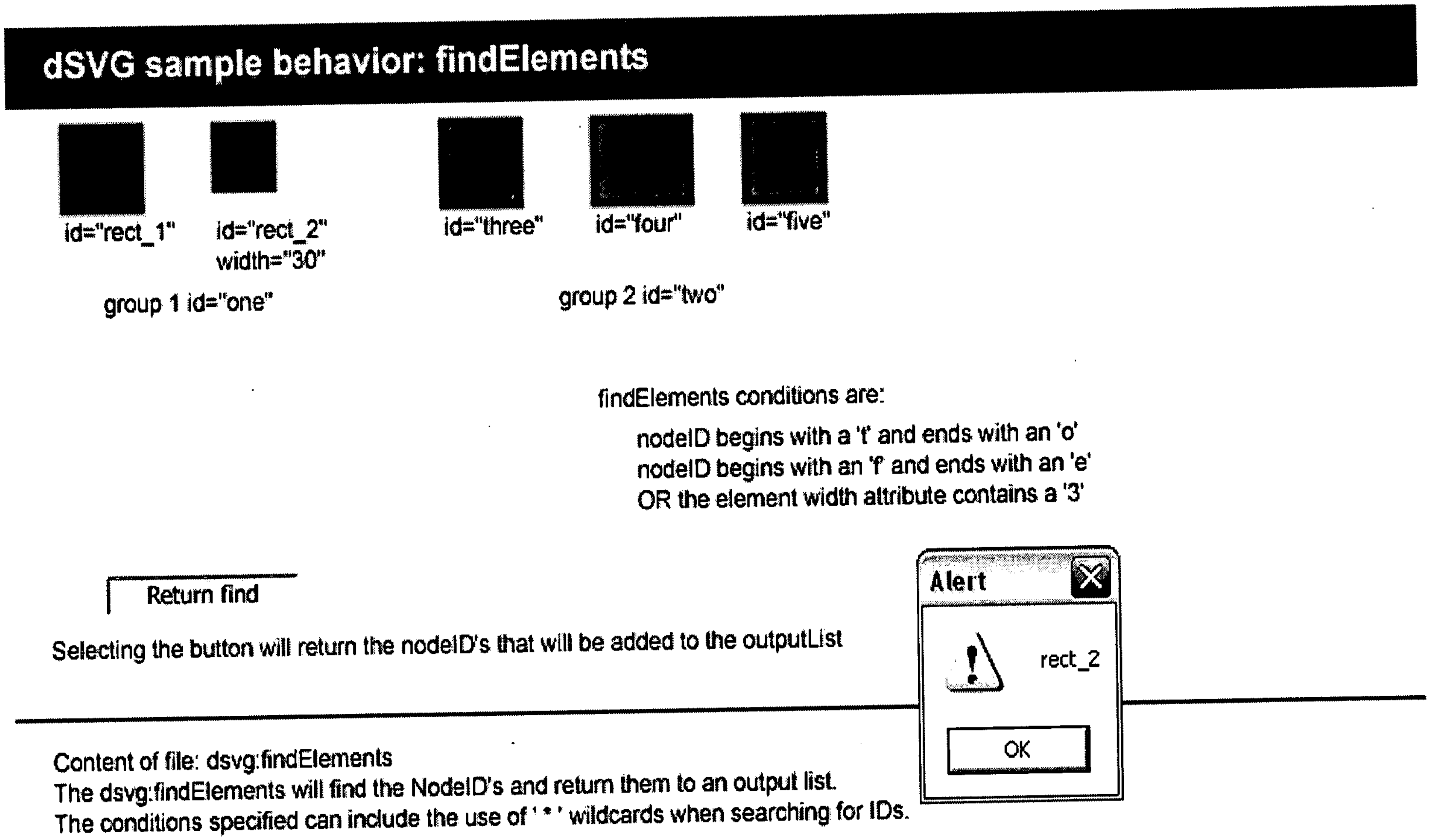


dSVG sample behavior: createElement

Pressing the button will create a solid blue circle with a dark blue border over top of the transparent one.

Content of file: dsvg:createElement, dsvg:setAttribute
The dsvg:createElement will create a new solid circle over top of the transparent one when the button is selected.
The new element is inserted into the specified location within the DOM.

Figure 13B



dSVG sample behavior: findElements

findElements conditions are:

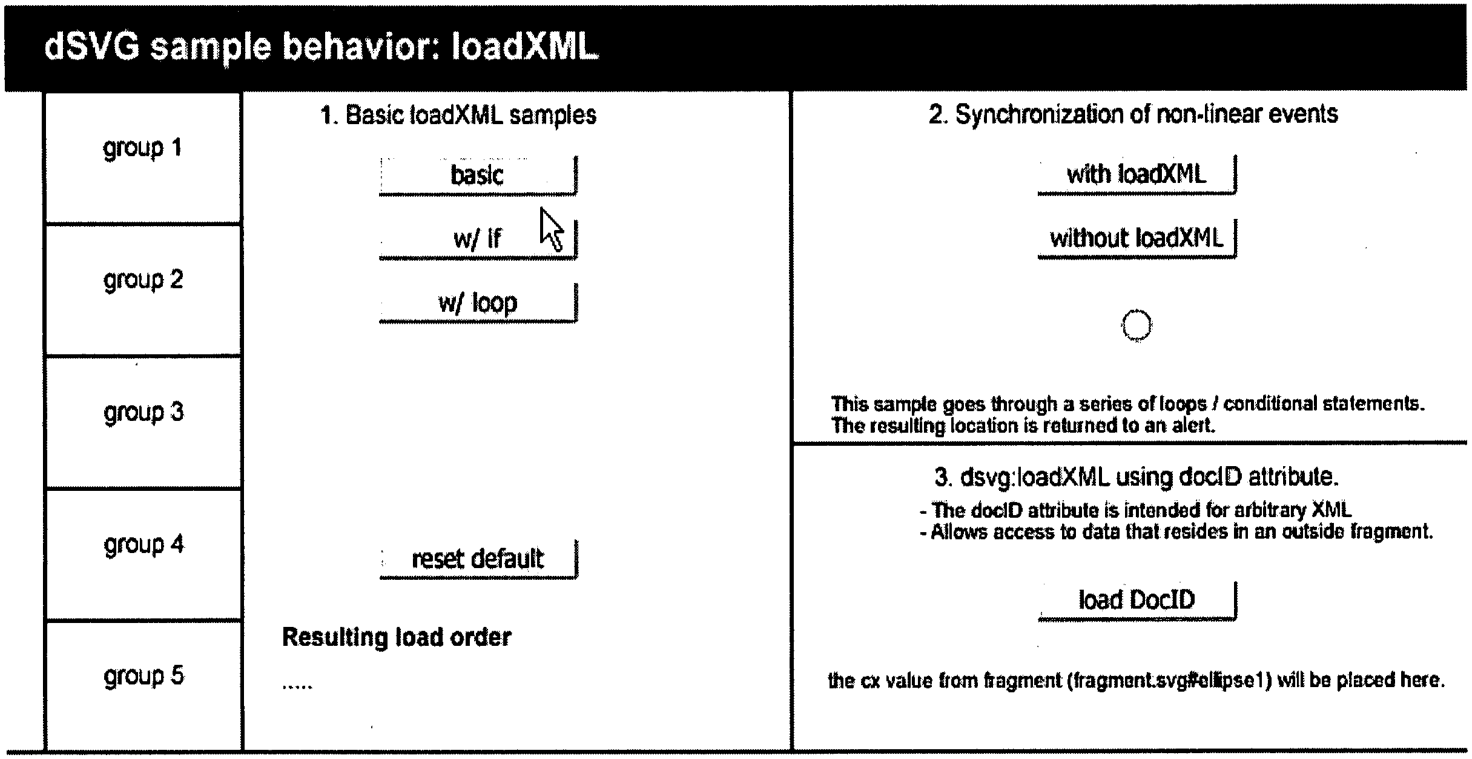
nodeID begins with a 't' and ends with an 'o'
nodeID begins with an 'f' and ends with an 'e'
OR the element width attribute contains a '3'

Selecting the button will return the nodeID's that will be added to the outputList

rect_2

Content of file: dsvg:findElements
The dsvg:findElements will find the NodeID's and return them to an output list.
The conditions specified can include the use of ' * ' wildcards when searching for IDs.

Figure 14



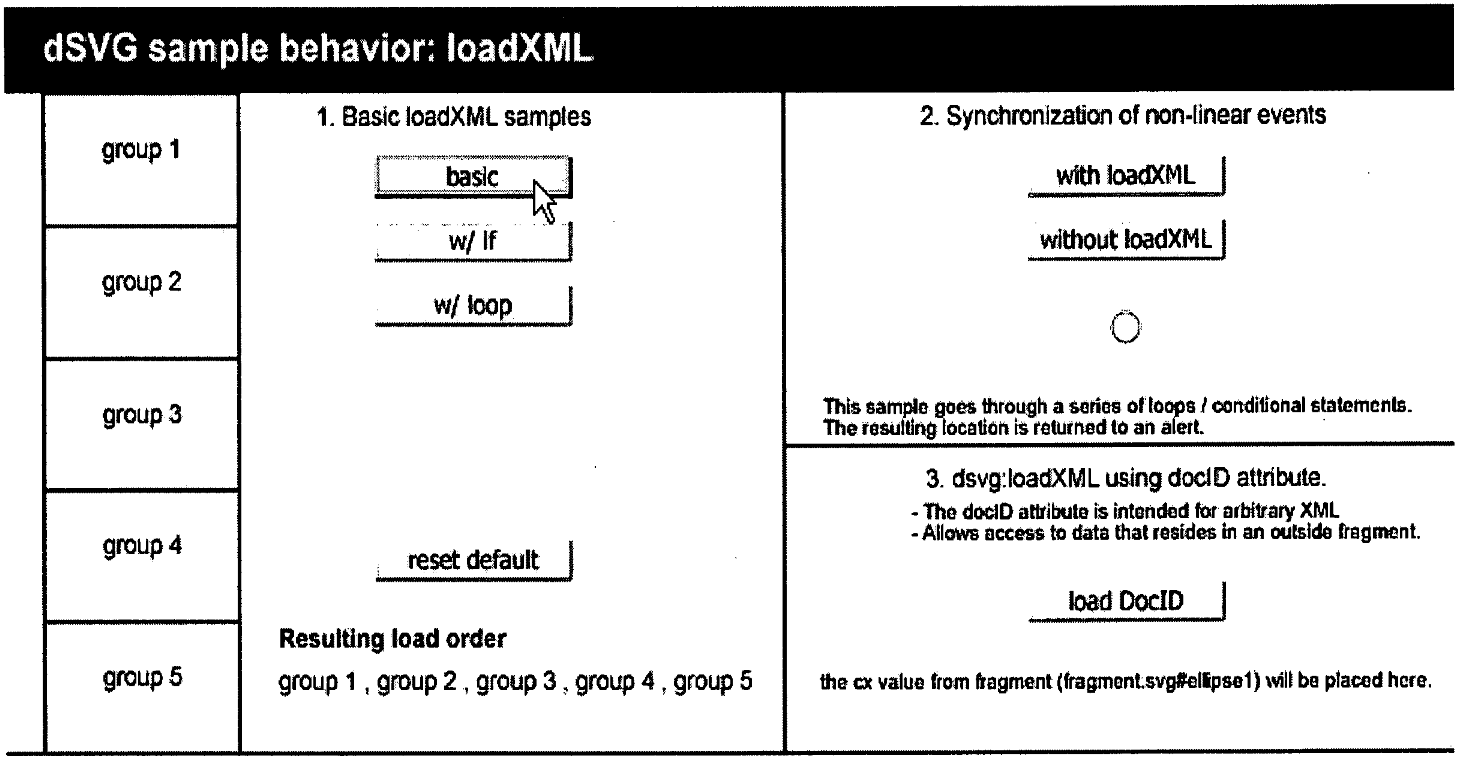
This sample goes through a series of loops / conditional statements.
The resulting location is returned to an alert.

- The docID attribute is intended for arbitrary XML
- Allows access to data that resides in an outside fragment.

the cx value from fragment (fragment.svg#ellipse1) will be placed here.

Section 1 illustrates basic usage of dsvg:loadXML.
Section 2 illustrates how loadXML can be used synchronously with non-linear events.
Section 3 illustrates how the 'docID' attribute can be used to retrieve data from outside document fragments.

Figure 15A



1. Basic loadXML samples

Resulting load order

group 1 , group 2 , group 3 , group 4 , group 5

2. Synchronization of non-linear events

This sample goes through a series of loops / conditional statements.
The resulting location is returned to an alert.

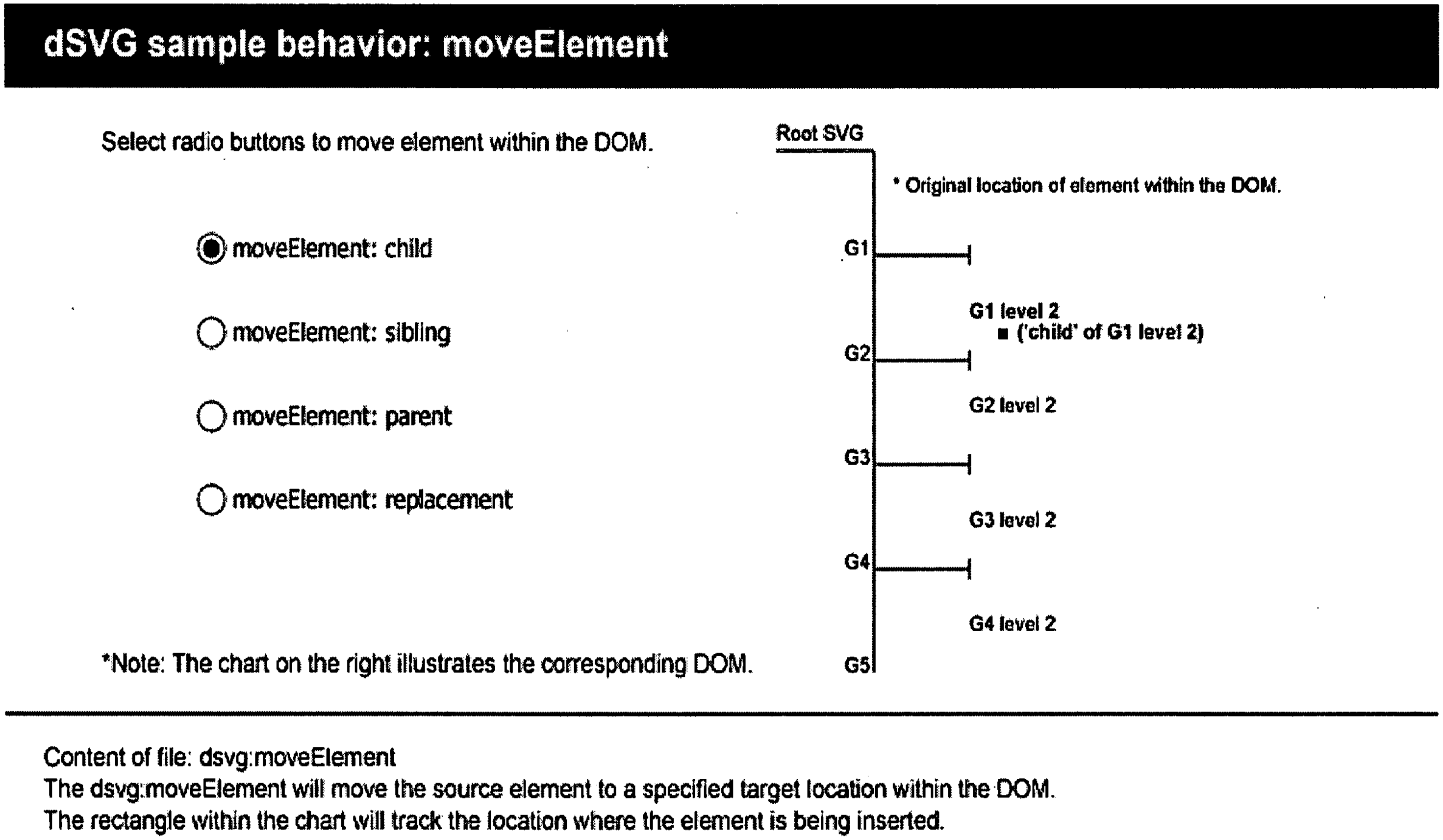
3. dsvg:loadXML using docID attribute.

- The docID attribute is intended for arbitrary XML
- Allows access to data that resides in an outside fragment.

the cx value from fragment (fragment.svg#ellipse1) will be placed here.

Section 1 illustrates basic usage of dsvg:loadXML.
Section 2 illustrates how loadXML can be used synchronously with non-linear events.
Section 3 illustrates how the 'docID' attribute can be used to retrieve data from outside document fragments.

Figure 15B



dSVG sample behavior: moveElement

Select radio buttons to move element within the DOM.

● moveElement: child

○ moveElement: sibling

○ moveElement: parent

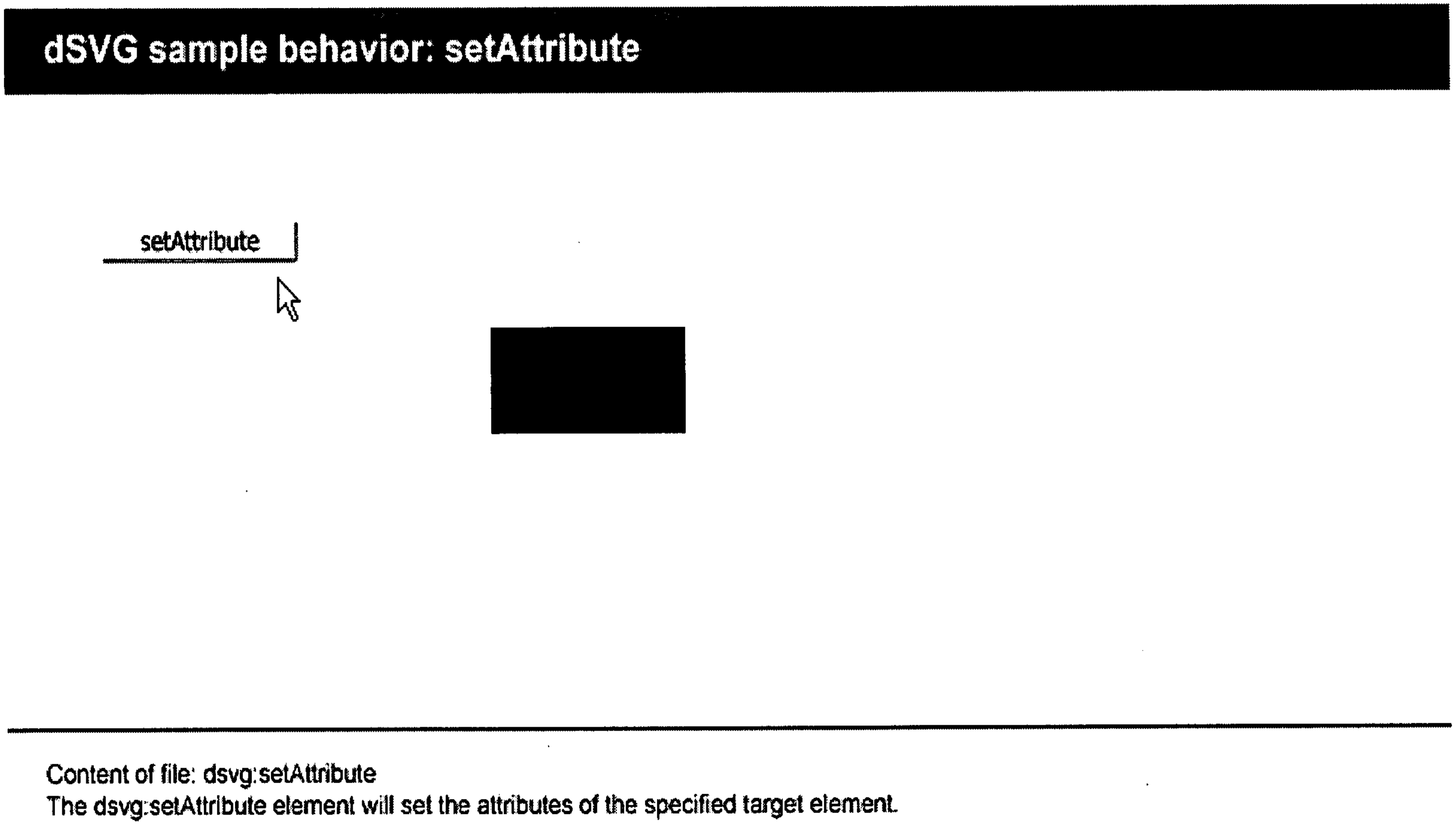
○ moveElement: replacement

*Note: The chart on the right illustrates the corresponding DOM.

Root SVG
* Original location of element within the DOM.
G1
G1 level 2
■ ('child' of G1 level 2)
G2
G2 level 2
G3
G3 level 2
G4
G4 level 2
G5

Content of file: dsvg:moveElement
The dsvg:moveElement will move the source element to a specified target location within the DOM.
The rectangle within the chart will track the location where the element is being inserted.

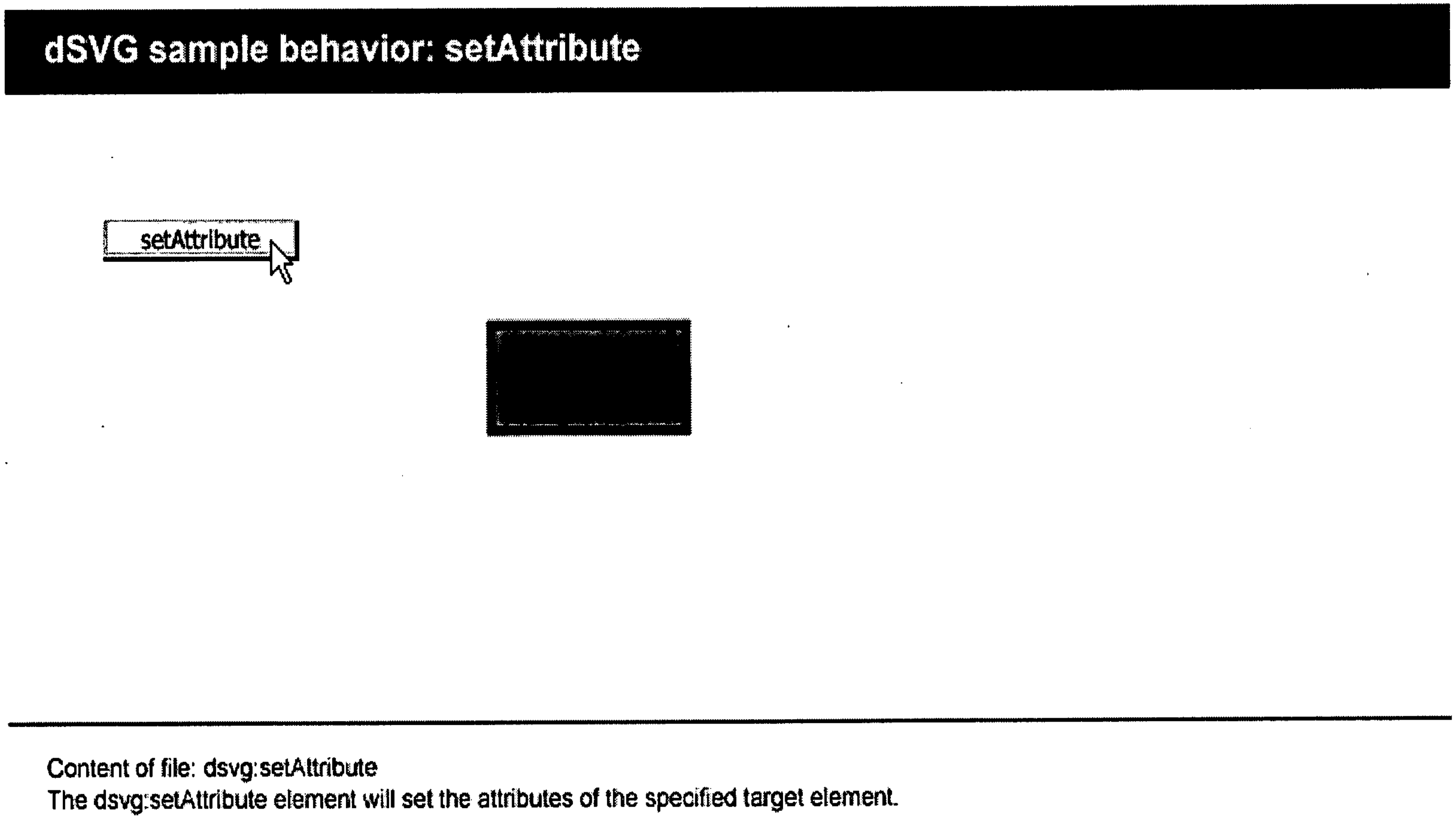
Figure 16



dSVG sample behavior: setAttribute

Content of file: dsvg:setAttribute
The dsvg:setAttribute element will set the attributes of the specified target element.

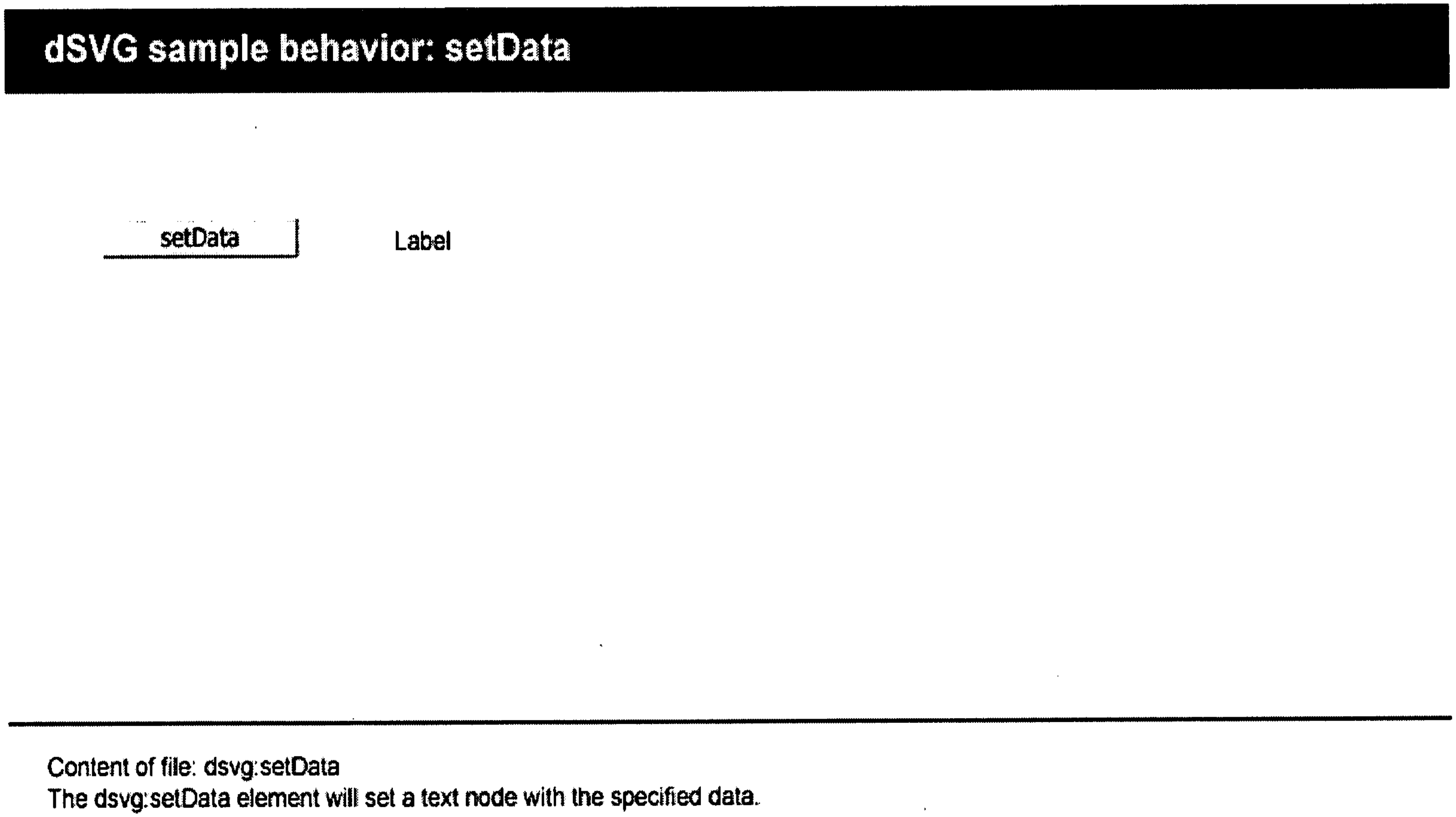
Figure 17A



dSVG sample behavior: setAttribute

Content of file: dsvg:setAttribute
The dsvg:setAttribute element will set the attributes of the specified target element.

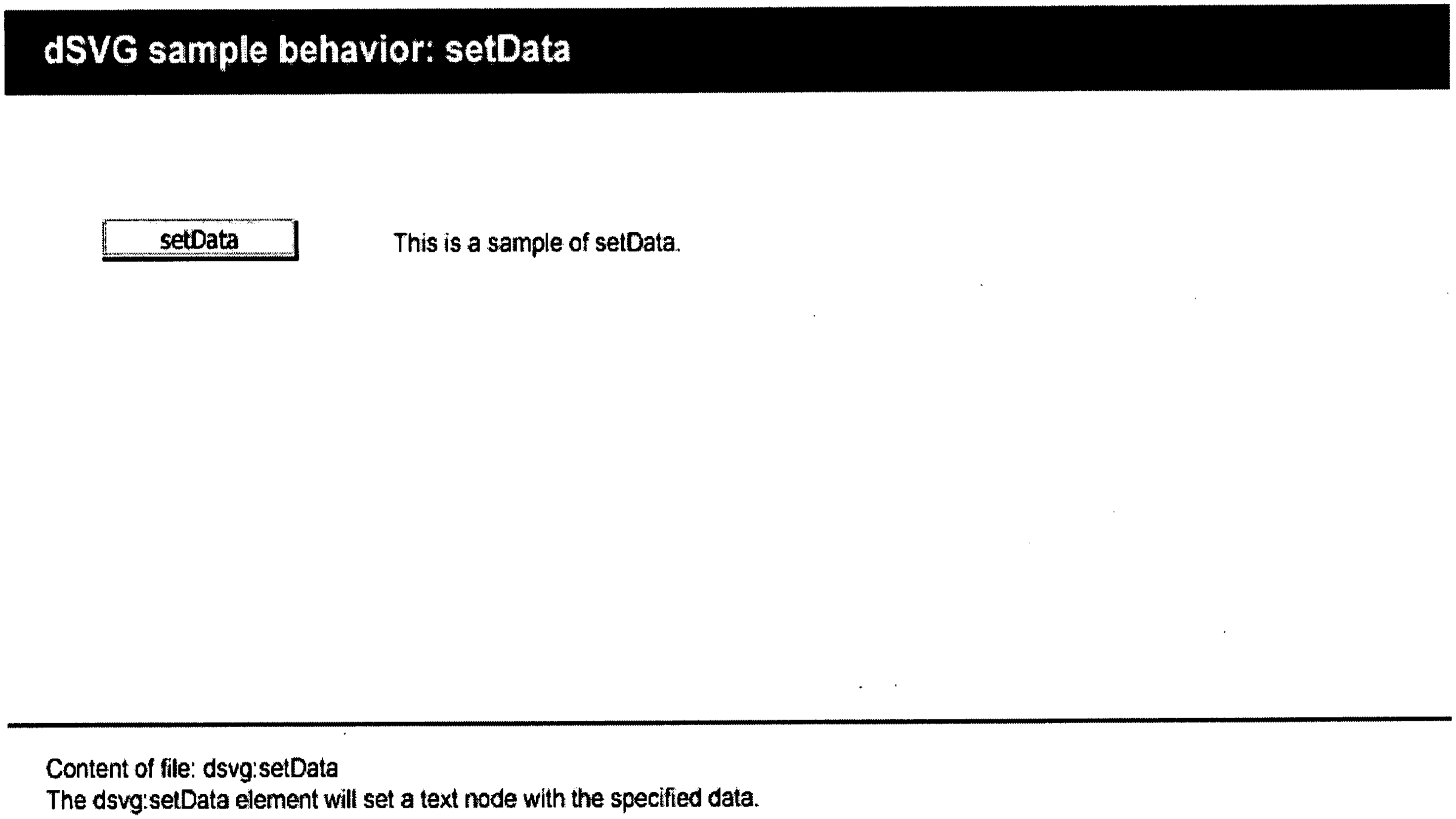
Figure 17B



dSVG sample behavior: setData

Content of file: dsvg:setData
The dsvg:setData element will set a text node with the specified data.

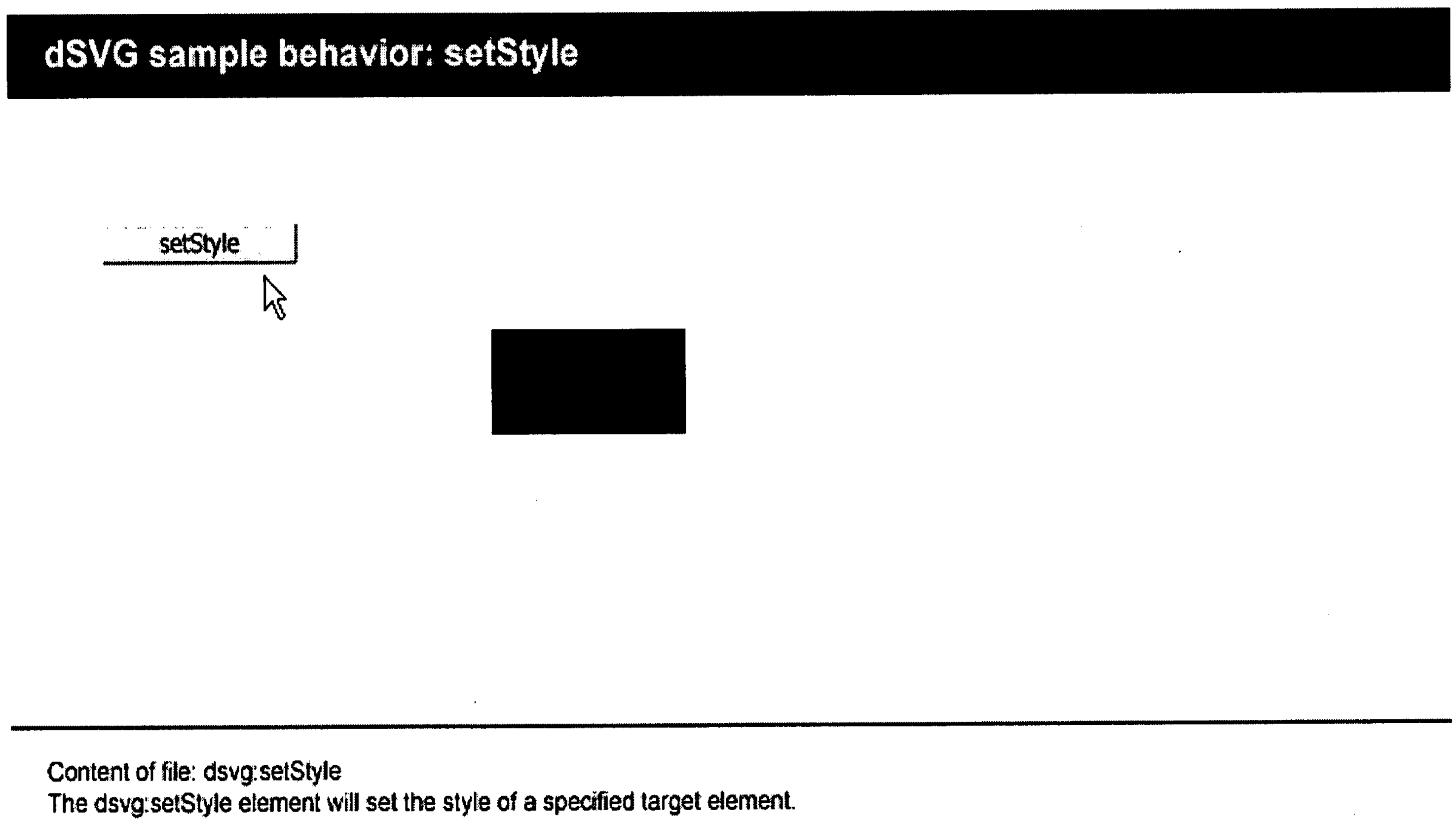
Figure 18A


dSVG sample behavior: setData

This is a sample of setData.

Content of file: dsvg:setData
The dsvg:setData element will set a text node with the specified data.

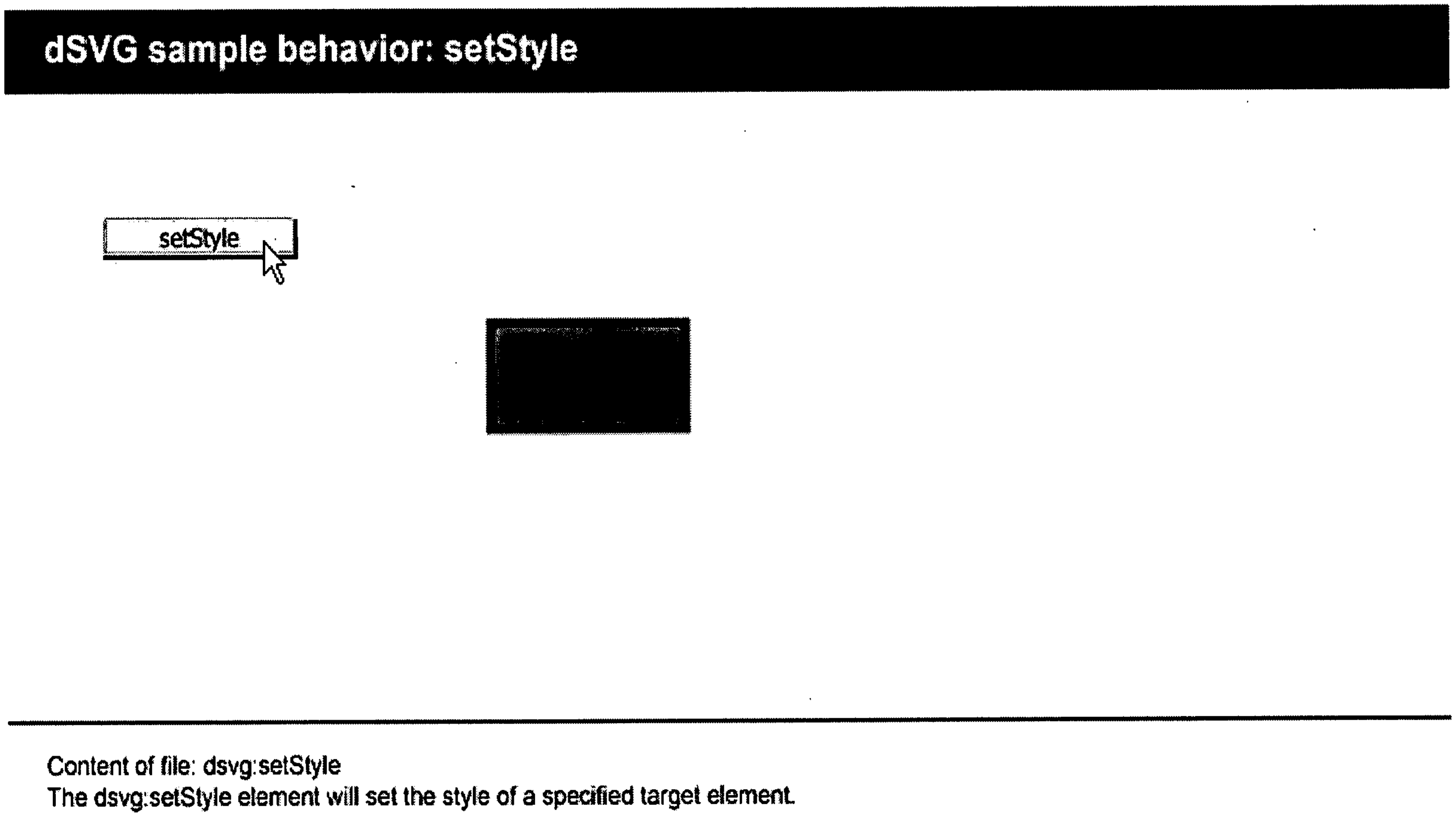
Figure 18B



dSVG sample behavior: setStyle

Content of file: dsvg:setStyle
The dsvg:setStyle element will set the style of a specified target element.

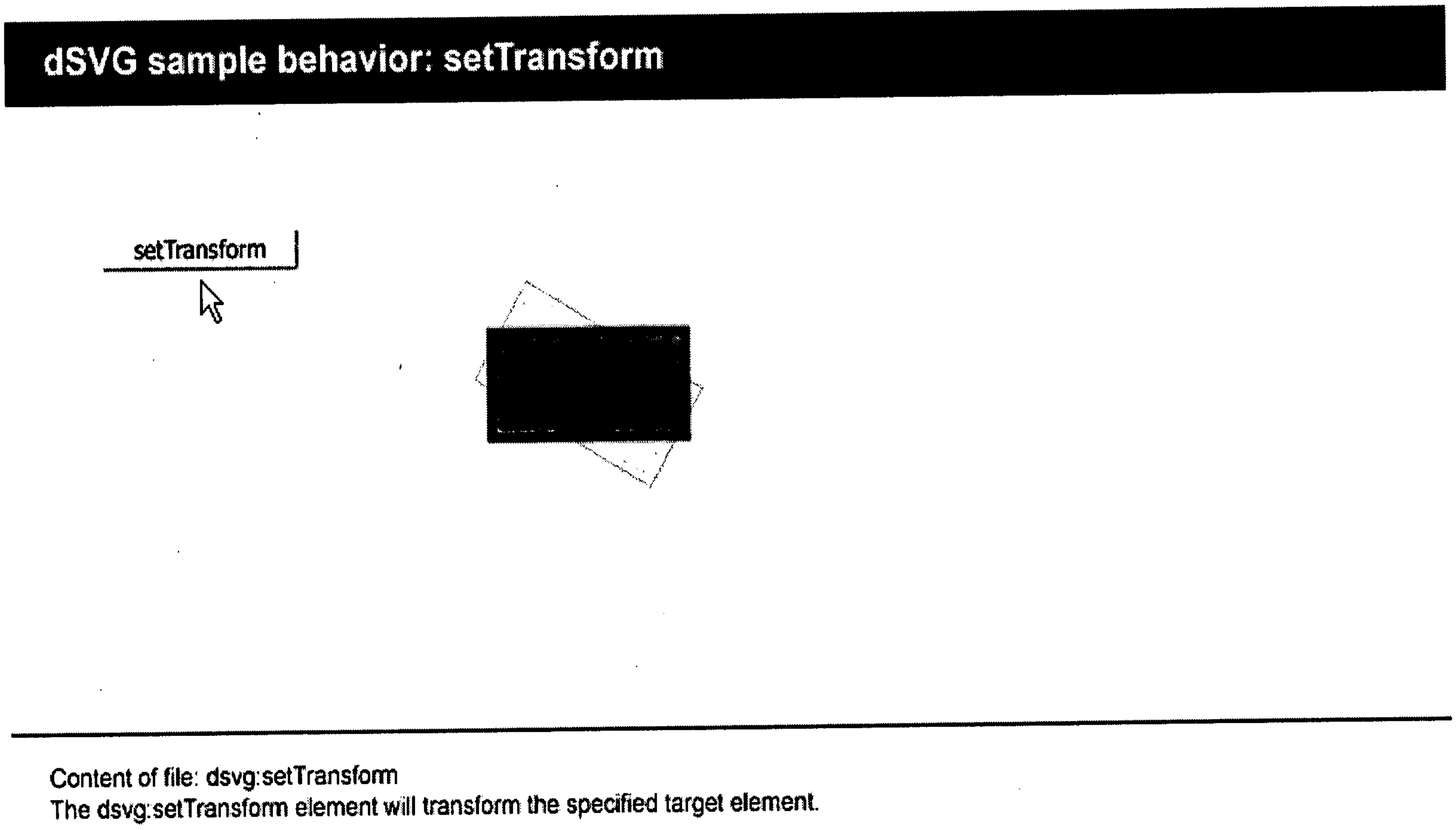
Figure 19A



dSVG sample behavior: setStyle

Content of file: dsvg:setStyle
The dsvg:setStyle element will set the style of a specified target element.

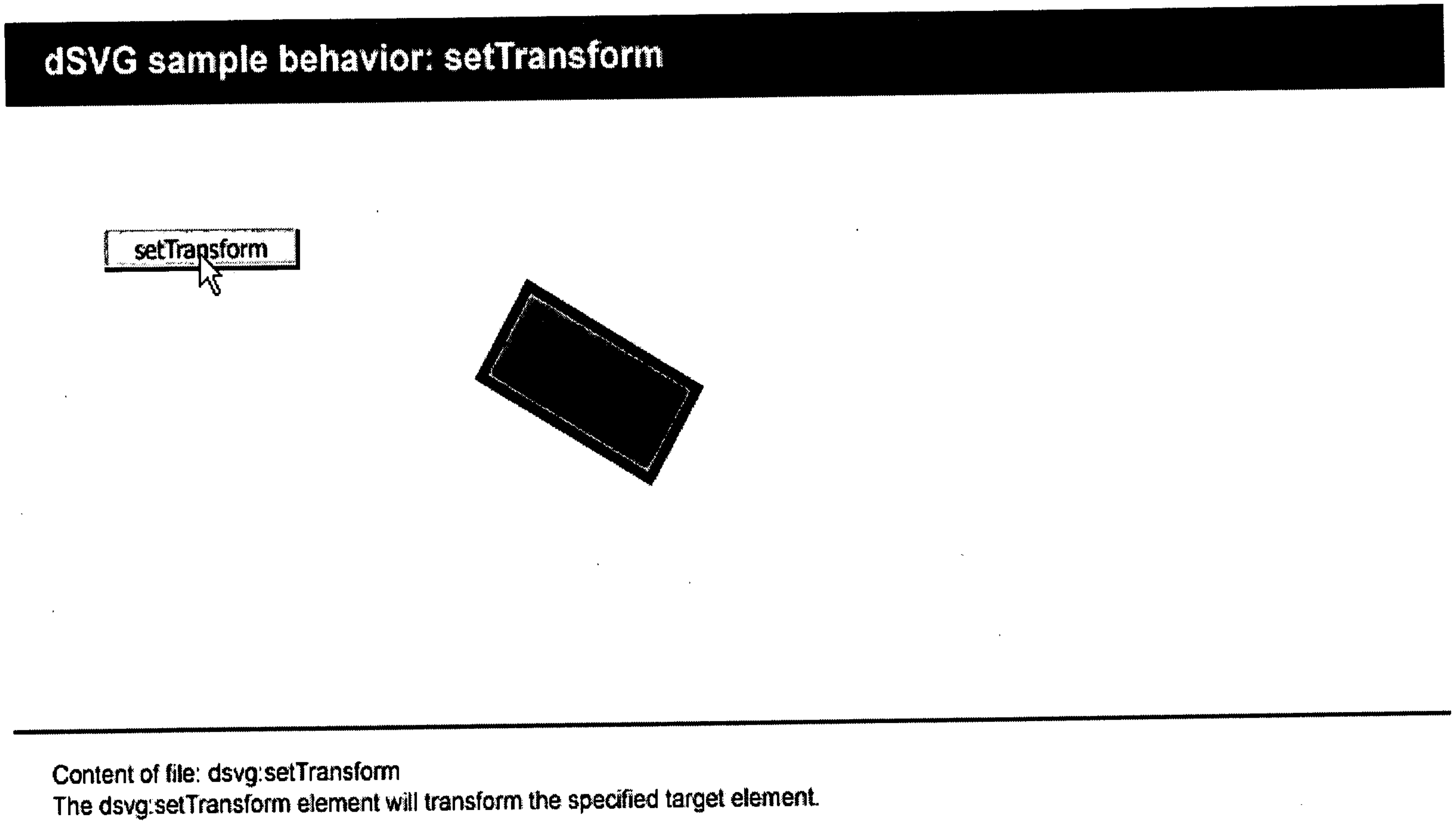
Figure 19B



dSVG sample behavior: setTransform

Content of file: dsvg:setTransform
The dsvg:setTransform element will transform the specified target element.

Figure 20A



dSVG sample behavior: setTransform

Content of file: dsvg:setTransform

The dsvg:setTransform element will transform the specified target element.

Figure 20B